Fermi Guest Investigator Opportunities

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Fermi GI Program Overview

- Broad community participation greatly enhances the scientific productivity of the Fermi mission
  - This is facilitated through a rigorous Guest Investigator (GI) program
- Primarily proposals for grant support
  - All science data products and basic analysis tools are publicly available through the FSSC as are proposal preparation and submission details

Program Overview (con.)

- **Participants can propose:**
  - **Analysis of all public data products**
  - **Correlated observations relevant to Fermi**
    - **Includes opportunities to participate in joint observation programs w/NRAO, NOAO, VERITAS, TESS and INTEGRAL**
    - **Observation time on these facilities available through the Fermi program**
  - **Theoretical investigations relevant to Fermi**

Program Overview (con.)

- 2-stage review process
  - The first stage is the *science review*
    - Dual-anonymous peer-evaluation process
  - Budget proposals are solicited from successful first stage proposers
    - Internal review by NASA
- Support for ~35 research programs
  - Our goal is for ~$75k average grants, although
  - Also 1+/-1 new Large Projects @ ~$150k per year

Recent History: Cycle 13 Summary

- 109 proposals received, 41 selected (40 grants)
- 38% approval rate, similar to Cycle-12 and an improvement *wrt* past cycles
  - Cycles 5-10 average was 22%
- Recent selection rate is ~consistent with the average for NASA GO programs

Cycle 13 Proposal Statistics

Requests

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109 proposals received, involving 344 individual investigators from 175 institutions and 25 countries
includes: 1 Large project request

41 selections, 40 grants awarded

oversubscription is ~2.7X (or ~37% selection rate)

Joint programs

Requested (Prop/Hrs)	Total Allocation
NRAO: (11/300)	/ (450-600 hrs on GBT, VLA & VLBA)
NOAO: (6/380)	/ (3-5% for various telescopes)
VERITAS: (0/0)	/ (120 hrs)
INTEGRAL:(0/0)	/ (250 ksec)

Awarded:

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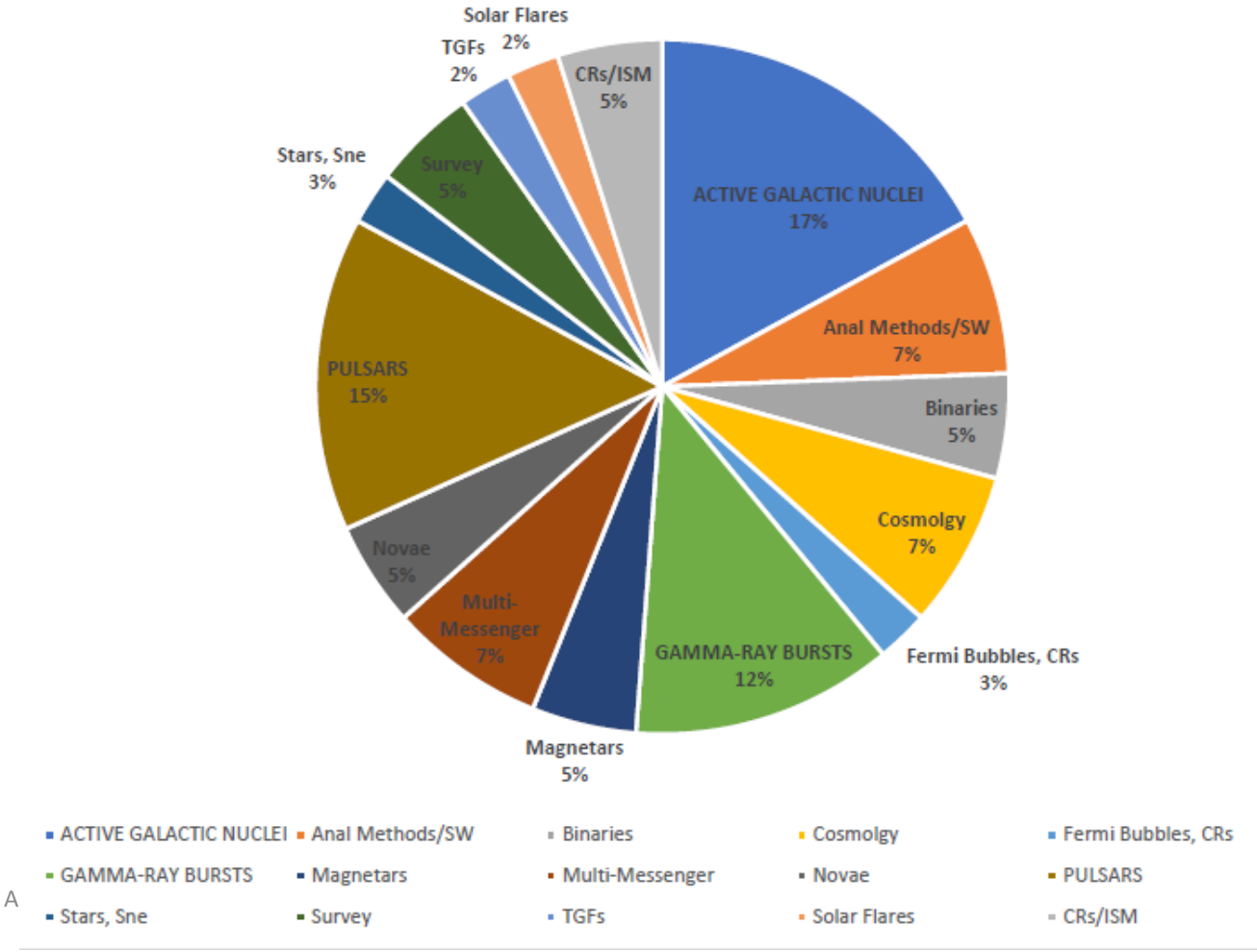
41 Programs (40 grants)
1 Large Project (VLBA Blazar monitoring)

$2.85M (+ $0.15M obligations)
Average grant: $74k

NOAO: 3 / 250 hrs
NRAO: 5 / 160 (4 VLA/VLBA, 1 GBT)
INTEGRAL: 0/0
VERITAS: 0/0

Topical Distribution



New for Cycle-14 and Beyond

- All proposals will be evaluated in the context of a **dual-anonymous peer review process**
- This is the case for all NASA GO/GI programs as well as ADAP, ATP and others

What is Dual-Anonymous Peer Review?

- In dual-anonymous peer review, the reviewers do not have explicit knowledge of the identities of the proposing team during the scientific evaluation of the proposal.
- The primary intent of dual-anonymous peer review is to eliminate “the team” as a topic during the scientific evaluation of a proposal.
- This creates a shift in the review-panel discussions, away from the individuals, and towards a discussion of the scientific merit of a proposal.
- The goal is to **eliminate or at least minimize Conscious and Subconscious Bias** in the selection process**.**

Dual Anonymous Proposal Preparation

- Stage-I proposal submission done as before via ARK/RPS
  - Include PI and all co-I info as in the past
  - Names are known to us but hidden from reviewers
  - Numerical references, no "first person" attributions
  - Panelists may not speculate PI, co-I identities
  - Include "team identity and expertise" page
- Relaxes certain types of panelists conflicts of interest
- **After** deliberation and grading names will be revealed
  - A proposal can then be disqualified, but not re-scored

Submission of Anonymized Proposals

- Exclude names and affiliations of the proposing team, including in figures and references to personal websites.
- Do not claim ownership of past work, e.g., “my previously funded work...” or “our analysis shown in Baker et al. 2012...”
- Cite references in the passive third person, e.g., “Prior analysis [1] indicates that …”.
- Do describe the work proposed, e.g., “We propose to do the following...” or “We will measure the effects of...”
- ✓ Include a separate not-anonymized “Expertise and Resources” document.

Example of Anonymization

- *In Rogers et al. (2014), we concluded that the best explanation for the dynamics of the shockwave and the spectra from both the forward-shocked ISM and the reverse-shocked ejecta is that a Type Ia supernova exploded into a preexisting wind-blown cavity. This object is the only known example of such a phenomenon, and it thus provides a unique opportunity to illuminate the nature of Type Ia supernovae and the progenitors. If our model from Rogers et al. (2014) is correct, then the single-degenerate channel for SNe Ia production must exist. We propose here for a second epoch of observations which we will compare with our first epoch obtained in 2007 to measure the proper motion of the shock wave.*

- Here is the same text, again re-worked following the anonymizing guidelines:
- *Prior work [12] concluded that the best explanation for the dynamics of the shockwave and the spectra from both the forward-shocked ISM and the reverse-shocked ejecta is that a Type Ia supernova exploded into a preexisting wind-blown cavity. This object is the only known example of such a phenomenon, and it thus provides a unique opportunity to illuminate the nature of Type Ia supernovae and the progenitors. If the model from [12] is correct, then the single-degenerate channel for SNe Ia production must exist. We propose here for a second epoch of observations which we will compare with a first epoch obtained in 2007 to measure the proper motion of the shock wave.*

Cycle 14 Timeline

- Schedule: Feb. 19, 2021 proposal due date
  - ~late April 2021; virtual review
  - Stage-I selections
  - July/August stage-II awards
- Hope to again select 30-40 programs
- No significant policy changes other than **dual-anonymous review process**

Additional Information

- Again, for all proposal preparation details please visit the FSSC Web site, in particular the "Proposals" page:
  - ***https://fermi.gsfc.nasa.gov/ssc/***
- Also, feel free to make use of our helpdesk with any Fermi-related questions
- **Good luck with your Fermi proposals!**